

REMARKS

Status Of The Claims

Claims 1-12 are pending in the application.

Claims 4-6 and 10-12 stand withdrawn from consideration due to a restriction requirement.

Claims 1-3 and 7-9 stand rejected.

The Amendment

Claim 7 has been amended herein to recite that the claimed chewing gum is a low moisture chewing gum. Support for the amendment is found, inter alia, in the specification at page 4, lines 4-12.

The Rejection Under 35 U.S.C. 103(a)

The Examiner has rejected claims 1-3 and 7-9 under 35 U.S.C. 103(a) as being unpatentable over Reynolds (WO 98/40406, pages 5,6). The Examiner holds as follows:

Reynolds discloses a chewing gum including 1-50% CPP-ACP and bicarbonate. The CPP-ACP promotes dental hygiene in individuals who chew the gum. The bicarbonate acts as a buffer for the gum. Sodium bicarbonate is a conventional type of bicarbonate. Sugarless gums are also conventional. Adjusting the amount of bicarbonate to act as a buffer would be well within the skill of the routines in this art.

The Examiner is respectfully requested to reconsider and withdraw the rejection for the reasons as follow.

Applicants claims are drawn to low moisture chewing gums comprising, by weight, from about 10% to 95% gum base, from about 0.1% to 15% sodium bicarbonate, and from about 0.01% to about 30% of CPP-ACP. The solid delivery form, chewing gum, prevents the two actives (CPP-ACP and sodium bicarbonate) from admixing and thereby remain stable over time. The use of a low moisture gum, i.e., one containing less than 2% moisture, further enhances that storage stability.

The art reference, Reynolds (WO 98/40406), concerns CPP-ACP complexes and their use as, inter alia, anti-caries agents. Reynolds teaches that the complex can be incorporated into oral compositions such as those listed at pages 5 and 6, namely, toothpaste, toothpowder, mouthwashes, troches, chewing gum, dental pastes, gingival massage creams, gargle tablets, dairy products and other foodstuffs. Reynolds further teaches that in certain, highly preferred, forms, the oral composition may be substantially liquid such as in a mouthwash or rinse. For these vehicles, Reynolds teaches that the pH

is typically from 7.0 to 9.0 (the preferred range for the use of CPP-ACP) and that the pH can be controlled by the use of agents such as buffering agents, such as, inter alia, sodium bicarbonate. (Mouthwashes are usually acidic in nature and in the pH range of 3-4.)

The Examiner holds that this teaching by Reynolds of a mouthwash containing CPP-ACP and sodium bicarbonate buffer makes applicants' claimed chewing gum *prima facie* obvious. Applicants respectfully submit that the Examiner's position is untenable. The facts at issue simply do not support it. Reynolds teaches a mouthwash, a liquid system. In liquid systems buffers such as sodium bicarbonate, can be used to control the pH. A buffer, by its nature, is defined as a solution that resists a change in pH when an acid or alkali is added or when the solution is diluted. A chewing gum, a solid material, cannot be buffered. There is no liquid component within which a buffering action can take place. One cannot use sodium bicarbonate in a chewing gum to "buffer" the gum. The addition would be pointless.

The only reference to sodium bicarbonate in the Reynolds teaching is that found at page 6. Reynolds does not teach sodium bicarbonate in chewing gum. Reynolds teaches very little concerning chewing gum. At page 10, lines 15-20 Reynolds provides general statements concerning generic ingredients in gum. At page 23, line 16, to page 24, line 9, Reynolds teaches the results of a study using a sugarfree, sorbitol-containing, gum but does not provide the formula. At page 31, Example 13, Reynolds provides the only chewing gum formula, one which on balance contains 12.4% moisture.

Sodium bicarbonate is not used by Reynolds in any of the further Examples. There is no learning from the teaching of Reynolds other than that one could use sodium bicarbonate in a mouthwash to act as a buffer. There is no learning from the teaching of Reynolds that one should use sodium bicarbonate in any other vehicle other than the mouthwash.

The teaching of Reynolds gives no implication that one could use sodium bicarbonate in a chewing gum together with the CPP-ACP taught therein. Reynolds leads neither by teaching nor example to an inference of the claimed invention. In view of the above, the rejection of claims 1-3 and 7-9, as amended, under 35 U.S.C. 103(a), should be withdrawn.

Conclusion

In view of the above applicants believe all of the claims in this application are in condition for allowance. If any questions remain, the resolution of which would be advanced by conference (telephonic or personal) with applicants' agent, the Examiner is invited to contact said agent at the telephone or the fax number noted below.

Respectfully submitted,
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Attachment: VERSION WITH MARKINGS TO SHOW CHANGES MADE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claim 7 (amended)

A low moisture chewing gum comprising

(d) from about 10% to about 95% by weight gum base; and,

(e) from about 0.1% to about 15% by weight of sodium bicarbonate, and,

(f) from about 0.01% to about 30% by weight of CPP-ACP.